



PATENT
Docket No.: 176/60981 (6-11402-1001)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Mahin D. Maines

Serial No. : 10/045,545

Cnfrm. No. : To Be Assigned

Filed : January 14, 2002

For : METHODS OF MODIFYING CELL
STRUCTURE AND REMODELING TISSUE

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) Examiner:
) To Be Assigned

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) Art Unit:
) To Be Assigned

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §§ 1.97-1.98

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

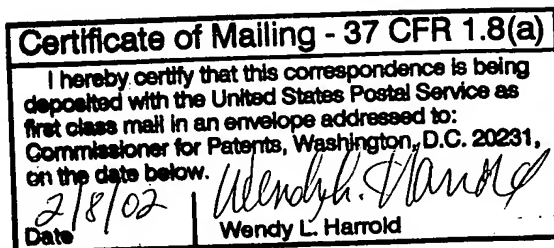
Pursuant to 37 CFR §§ 1.97-1.98, applicant hereby brings to the attention of the
United States Patent and Trademark Office, the enclosed references listed on the attached
PTO-1449 form.

Respectfully submitted,

Date: February 3, 2002

Edwin V. Merkel
Registration No. 40,087

NIXON PEABODY LLP
Clinton Square, P.O. Box 31051
Rochester, New York 14603
Telephone: (585) 263-1128
Facsimile: (585) 263-1600



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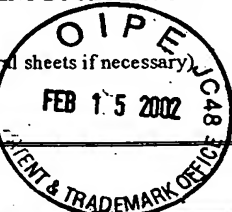
DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANS- LATION IF APPRO- PRIATE

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

		1	Panahian et al., "Enhanced Neuronal Expression of the Oxidoreductase - Biliverdin Reductase - After Permanent Focal Cerebral Ischemia," <u>Brain Research</u> 850:1-13 (1999)	
		2	Maines et al., "Spin Trap (N-t-butyl- α -phenylnitron)-Mediated Suprainduction of Heme Oxygenase-1 in Kidney Ischemia/ Reperfusion Model: Role of the Oxygenase in Protection Against Oxidative Injury," <u>The Journal of Pharmacology and Experimental Therapeutics</u> 291(2):911-919 (1999)	
		3	Maines et al., "Human Biliverdin IX α Reductase is a Zinc-Metalloprotein: Characterization of Purified and <i>Escherichia coli</i> Expressed Enzymes," <u>Eur. J. Biochem.</u> 235:372-381 (1996)	
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		5	Ewing et al., "Biliverdin Reductase is Heat Resistant and Coexpressed with Constitutive and Heat Shock Forms of Heme Oxygenase in Brain," <u>J. Neurochem.</u> 61:1015-1023 (1993)	
		6	Maines et al., "Purification and Characterization of Human Biliverdine Reductase," <u>Archives of Biochemistry and Biophysics</u> 300(1):320-326 (1993)	
		7	Fakhrai et al., "Expression and Characterization of a cDNA for Rat Kidney Biliverdin Reductase," <u>J. Biol. Chem.</u> 267(6):4023-4029 (1992)	
		8	Huang et al., "Detection of 10 Variants of Biliverdin Reductase in Rat Liver by Two-Dimensional Gel Electrophoresis," <u>J. Biol. Chem.</u> 264(14):7844-7849 (1989)	
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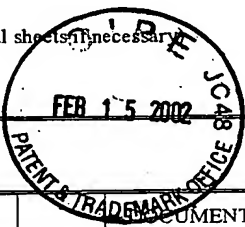
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		9	Huang et al., "Microheterogeneity of Biliverdin Reductase in Rat Liver and Spleen: Selective Suppression of Enzyme Variants in Liver by Bromobenzene," <u>Archives of Biochemistry and Biophysics</u> 274(2):617-625 (1989)	*
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		15	Qato et al., "Prevention of Neonatal Hyperbilirubinaemia in Non-Human Primates by Zn-Protoporphyrin," <u>Biochem. J.</u> 226:51-57 (1985)	*
		16	Magnusson et al., "Heme Oxygenase-1, Heme Oxygenase-2 and Biliverdin Reductase in Peripheral Ganglia from Rat, Expression and Plasticity," <u>Neuroscience</u> 95(3):821-829 (2000)	
		17	Ewing et al., "Immunohistochemical Localization of Biliverdin Reductase in Rat Brain: Age Related Expression of Protein and Transcript," <u>Brain Research</u> 672:29-41 (1995)	
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19	McCoubrey et al., "The Structure, Organization and Differential Expression of the Rat Gene Encoding Biliverdin Reductase," <u>Gene</u> 160:235-240 (1995)	
20	Huang et al., "Bromobenzene-Mediated Alteration in Activity and Electrophoretic Pattern of Biliverdin Reductase Variants in Rat Kidney," <u>Mol. Pharmacol.</u> 37:25-29 (1989)	
21	Beri et al., "Biliverdin Reductase Activity in Relation to Bilirubin," <u>Biochemical Society Transactions</u> 20:353S (1992)	X
22	Kutty et al., "Rat Liver Cytochrome P-450b, P-420b, and P-420c are Degraded to Biliverdin by Heme Oxygenase," <u>Archives of Biochemistry and Biophysics</u> 260(2):638-644 (1988)	X
23	Bell et al., "Kinetic Properties and Regulation of Biliverdin Reductase," <u>Archives of Biochemistry and Biophysics</u> 263(1):1-9 (1988)	X
24	Kutty et al., "Hepatic Heme Metabolism: Possible Role of Biliverdin in the Regulation of Heme Oxygenase Activity," <u>Biochemical and Biophysical Research Communications</u> 122(1):40-46 (1984)	X
25	Yamaguchi et al., "Biliverdin-IX α Reductase and Biliverdin-IX β Reductase from Human Liver," <u>J. Biol. Chem.</u> 269(39):24343-24348 (1994)	X
26	Maines, "New Developments in the Regulation of Heme Metabolism and Their Implications," <u>CRC Critical Reviews in Toxicology</u> 12(3):241-314 (1984)	X

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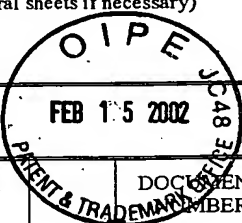
27	Terry et al., "Inactivation of Phytochrome- and Phycobiliprotein-Chromophore Precursors by Rat Liver Biliverdin Reductase," <u>J. Biol. Chem.</u> 268(35):26099-26106 (1993)	✓
28	Willis et al., "Heme Oxygenase: A Novel Target for the Modulation of the Inflammatory Response," <u>Nature Medicine</u> 2(1):87-90 (1996)	✓
29	Maines, "Characterization of Heme Oxygenase Activity in Leydig and Sertoli Cells of the Rat Testes," <u>Biochemical Pharmacology</u> 33(9):1493-1502 (1984)	✓
30	Lee et al., "Overexpression of Heme Oxygenase-1 in Human Pulmonary Epithelial Cells Results in Cell Growth Arrest and Increased Resistance to Hyperoxia," <u>Proc. Natl. Acad. Sci. USA</u> 93:10393-10398 (1996)	✓
31	Siow et al., "Heme Oxygenase-Carbon Monoxide Signalling Pathway in Atherosclerosis: Anti-Atherogenic Actions of Bilirubin and Carbon Monoxide?," <u>Cardiovascular Research</u> 41:385-394 (1999)	
32	Komuro et al., "Cloning and Characterization of the cDNA Encoding Human Biliverdin-IX α Reductase," <u>Biochimica et Biophysica Acta</u> 1309:89-99 (1996)	✓
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35	Ennis et al., "Expression of Rat Biliverdin Reductase as a Glutathione S-transferase Fusion Protein," <u>Biochemical Society Transactions</u> 23:443S (1995)	✓

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		37	Maines, "Multiple Forms of Biliverdin Reductase: Age-Related Change in Pattern of Expression in Rat Liver and Brain," <u>Molecular Pharmacology</u> 38:481-485 (1990)
		38	Mayer et al., "Promotion of <i>trans</i> -Platinum <i>In Vivo</i> Effects on Renal Heme and Hemoprotein Metabolism by D, L-Buthionine-S,R-Sulfoximine," <u>Biochemical Pharmacology</u> 39(10):1565-1571 (1990)
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